

## REMARKS/ARGUMENTS

By way of an Office Action dated May 5, 2005, the Office's previous rejection of claims 1-38, pursuant to 35 U.S.C. § 112 was withdrawn. However, the rejection of claims 1 through 38 under 35 U.S.C. § 102(b) were continued in light of Marron.

After reviewing the comments of the Examiner, Applicant believes that as an initial matter, the Examiner should be aware of the general distinction between Marron and the present invention. Marron is directed to "replacing old operation system programs or modules with new updated versions thereof while providing continuous availability and operations of the system." (Abstract). To solve this problem, Marron does not modify the old program, but routes processes from the old program to a separate and independently executing new program. (Co. 7, lines 29-31). Marron clearly distinguishes between the old program, new program, and processes routed from the old program to the new program. Marron does not suspend the old or new program, but at best, places the process in a wait state. (Col. 7, lines 39-40).

In contrast, the present invention could be used to modify the old program, update the old program itself, and resume the old program. The present invention does not need the new program and does not route processes from one independent and separately executing program to another.

After consideration of the arguments of the application, the Office Action noted that the "old/new programs" of Marron read on Applicant's claims since the claims do not limit the size of segments and hence first version grains. In relying upon the

language of the Office Action, the Applicant has limited the independent claims so that the claims satisfy the concerns of the Examiner. Specifically, the applicant has satisfied the Examiner's concerns that first version grains are not entire program units. Therefore, the currently amended independent claims 1, 8, 14, 20, 26, and 32 have been amended to clarify that first version grains are smaller than the target software application so that the target software application is segmented into grains where such first version grains are smaller than the target software application.

Applicant has taken care to avoid introducing new matter in this amendment. New matter involves the addition of material that was not originally included in the specification or claims of the original application. Specifically, Applicant has amended claims to simply clarify that grains, as claimed, are of a smaller size than said target application. In the original specification, and as noted by the Examiner, Applicant disclosed grains that can be as small as a single statement.

Respectfully, Applicant believes that the independent claims and the associated dependent claims are in a position of allowance since Marron does not claim or disclose segmenting the target software application into segments or grains that are smaller in size than the entire target software application.

Specifically, Marron is limited to replacement of entire operating system modules which the Office has described as the "old/new programs" of Marron. Marron does not segment an existing software application into grains that are smaller than the target software application as in the pending application, but Marron contemplates and

discloses the replacement of entire programs. For example, Marron contains the following disclosures, "The general problem that the invention addresses and solves is how to replace modules ...." (Marron, col. 6, lines 26-28). The invention dynamically installs "new modules and programs." (Marron, col. 6, line 55). Therefore, Marron does not disclose or anticipate claims 1 through 38 since these claims contemplate first version grains being segments of the existing target software application that are smaller than the entire target software application. As presently amended, first version grains are segments of the target software application that do not encompass the entire program. Specifically, the amended claims describe first version grains as smaller than the target software application.

A second version grain of the present invention does not independently execute. As amended, the independent claims clarify that the second version grains are not able to independently execute. Therefore, as stated in the independent claims of the application as amended, Marron does not claim or disclose a second version grain.

"New programs" as disclosed in Marron are complete, compiled, and linked executable programs. Second version grains as claimed are not able to independently execute so that Marron does not anticipate second version grains. Specifically, Marron states that the purpose of the invention is "replacing old operating system programs or modules with new updated version...." (Marron, Abstract). Marron must determine when to execute the old programs or when to execute the new

programs. (Marron, Abstract and Fig 2B, step 64 "Switch Over To New Programs" and Fig 3, steps 72, "Route to New Program" and step 74, "Route to Old Program"). As Applicant has stated, the grains delineate the source code into discreet segments. Source code, as is very well known by those skilled in the art, is not capable of executing until it has been compiled and thus transformed into an executable format. As such, Applicant's amendment adding the limitation of said second version grain being unable to independently execute, has support in the patent application as originally filed. Specifically, at line 19 on page 14 of the original application, the application states, "The computer programmer retrieves the source code containing function 18 into an editing module and modifies grain 18c into grain 44...." Thus, it is clear that these grains deal with source code. As stated above, source code is not executable until it has been compiled. As such, Marron's independently executable change modules cannot be used to anticipate Applicant's second version grains.

The Office Action has also made specific reference to the contents of the Applicant's response to the First Office Action. Generally, Applicant respectfully does not believe that Marron should be read so broadly, particularly when the basis of the Final Office Action is pursuant to 35 U.S.C. § 102 and due to anticipation.

Further, the problem addressed by Marron and that of the present invention are different. Marron is directed to mainframes such as "IBM ESA/390", that can have multiple instances of programs running. (Col. 1, lines 11-27). Marron makes the clear distinction between the old/new program and processes. Respectfully, the safety

points of Marron that may be in the old program (Col. 7, lines 34-36) do not show that the old program will be suspended. Specifically, the reference to the “wait” in Marron states that “a ‘wait’ instruction that places the process in a wait state.” (Col. 7, lines 39-40). A process, according to Marron, is a task being performed by the system. The process will be “routed either to the old code if the process is unsafe or to the new code if the process is safe.” (Col. 7, lines 30-31). The process which is placed in a “wait” state is all that is disclosed by Marron. (Col. 7, lines 39-40).

Specifically, Marron states that “multiple tasks and processes can independently access the programs.” (Col. 1, lines 19-20). Therefore, any mention by Marron of placing processes in wait states does not equate to suspending the old or new program and, therefore, does not anticipate suspending the target software application. Respectfully, Applicant does not believe that Examiner’s statement that Marron’s “wait” places the target software application in a suspended state properly considers the clear delineation between the old program and process expressly made by Marron.

Since Marron expressly states that “a ‘wait’ instruction that places the process in a wait state” (Co. 7, lines 39-40) and the process is routed to the old or new program (Col. 7, lines 30-31), the process is separate and apart from the old or new program. Therefore, Marron’s disclosure of placing the process in a wait state cannot be equated to placing the old or new program in a wait state.

Further, placing the old or new program in a wait state is non-sensical given the purpose of Marron. Marron is directed to "replacing old operation system programs or modules with new updated versions thereof while providing continuous availability and operation of the system." (Abstract). To suspend the old or new program would not provide continuous availability and operation of the system. However, placing the process in a wait state prior to selecting whether to route to the old or new program would allow continuous availability and operation of the system of Marron.

Respectfully, the "wait instruction" places the process in a wait state, not the entire old and new programs. Therefore, as so much as the Examiner equates the old and new program with the target software application, Marron does not anticipate suspending the target software application.

Further, Marron itself notes that "safety points most often reside in modules which are not being changed." (Col. 2, lines 29-31). This is consistent with Marron's use of safety points to place processes in wait states, but is not consistent with placing the old or new program in a wait state. The present invention suspends the target software application for modification. Marron places the process in a wait state and does not suspend the old program, but routes the process to the new program.

Marron's determination of when a process is to be routed from the old program to the new program does not anticipate modifying the old or new program to the new program. Marron has the old program fully executable and the new program executable and processes are routed between the old program to the new program.

Marron does not modify the old and new program according to dictums of a received hot pack. Marron only makes the logic decision as when to route a process from the old program to the new program, not when to modify the old or new programs. Further, in Marron, the old program exists on the mainframe and should be most closely associated with the target software application. The target software application is not properly associated with both the old and new program of Marron. Marron simply routes processes from the old to new programs. The present invention, however, modifies the old program into a different version and does not have a separate new program as in Marron. Therefore, any reference to the new program of Marron cannot anticipate the claims of the present application. Specifically, Marron does not claim or disclose the modification of the target software application, but of routing a process between two existing, distinct and separately executing programs, the old program and new program of Marron.

The Examiner states that the Marron invention continues processing once the update is complete. Respectfully, this is too broad a reading of Marron. Once Marron routes the process to the new program, the old program of Marron does not continue and does not execute. While the process may continue the new program executed for the first time for that process and the old program does not execute. Therefore, since the target software application of the present invention is most closely mapped to the old program, Marron does not anticipate the suspension and resumption of execution of the target software application. Even if the target software application is considered

both the old and new program, execution is not suspended and resumed. The process is routed from the old program to the new program so that there is no suspension and resumption. Given Marron's clear distinction between the old program, the new program and processes, Marron does not anticipate the suspension and resumption of execution of the target software application.

The Examiner equates safety points and crumbs. Respectfully, this analysis does not consider the express distinction between the old program, the new program, and processes. Marron uses safety points to determine when a process is safe to be routed from an old program to a new program. The safety points of Marron are not used to determine when it is "safe" to modify the old program. In the present invention, crumbs are used in the target software application itself that can point the execution pointer within the target software application to another location. Marron does not contemplate pointing the execution pointer to another location, but only routing a process to the entire old program or the entire new program. Marron does not claim or disclose pointing the execution pointer to another location when the execution pointer is located in the old program and, therefore, the target software application.

Although the arguments above are principally directed to the independent claims, they are equally applicable to the remaining dependent claims. For the reasons presented herein, and other reasons, Applicant respectfully requests that this



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application be granted a notice of allowance for claims 1 through 38 in the normal course of Patent Office business.

In the event that the Examiner does not find these amendments and arguments persuasive, the Applicant requests an interview to discuss the Office Action and claims of this pending application.

Respectfully submitted,



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